A sample heater assembly, for use with a chemical agent detector, comprising:
 a heating element; and,

a sample containment reservoir conductively attached thermally to the heating element to effectively vaporize one or more low volatility agents for detection thereof.

- 2. The sample heater assembly of claim 1, further comprising a screened section of the sample containment reservoir.
- 3. The sample heater assembly of claim 1, further comprising the sample heater assembly configured with a slotted channel effective for placing the sample heating assembly over an appropriate detection window.
- 4. The sample heater assembly of claim 3, wherein the appropriate detection window comprises part of a M256 Chemical Agent Detector.
- 5. The sample heater assembly of claim 1, further comprising an attaching mechanism effective for placing the heating element above the sample containment reservoir.
- 6. The sample heater assembly of claim 5, wherein the attaching mechanism comprises a

slotted channel therein.

- 7. The sample heater assembly of claim 5, wherein the attaching mechanism provides a means for adjusting the distance of the element heater to the sample containment reservoir.
- 8. The sample heater assembly of claim 1, wherein the heating element comprises a Mustard Agent Heater Assembly.
- The sample heater assembly of claim 5, wherein the heating element comprises a
  Mustard agent Heater Assembly.
- 10. The sample heater assembly of claim 1, wherein the low volatility agents comprise one or more chemical warfare agents.
- 11. The sample heater assembly of claim 10, wherein the one or more chemical warfare agents are selected from the group consisting of blister agents, blood agents and nerve agents.

12. The sample heater assembly of claim 11, wherein the nerve agents comprise VX.

- 13. An M256 Chemical Agent Detector in combination with the sample heater assembly of claim 1.
- 14. A method for detecting low volatility agents, comprising the steps of:

providing a sample heater assembly having a heating element and a sample containment reservoir conductively attached thermally to the heating element to effectively vaporize one or more low volatility agents for detection thereof;

placing one or more low volatility agents into the sample containment reservoir; and, heating the sample containment reservoir effectively to vaporize the low volatility agents for detection.

- 15. The method of claim 14, wherein the heating element comprises a Mustard Agent Heater Assembly.
- 16. The method of claim 14, wherein the one or more low volatility agents comprise chemical warfare agent.

17. The method of claim 14, wherein the step of placing one or more low volatility agents into the sample containment reservoir comprises the steps of detecting a chemical warfare agent with M8 Detection Paper and inserting the M8 Detection Paper with detected absorbed chemical warfare agent into the sample containment reservoir.